

IN THE CLAIMS

Please amend the claims to read as follows:

Listing of Claims

1. (Currently amended) A process for the loading of fuel into an aircraft ~~(1)~~ on the ground, said aircraft comprising fuel tanks ~~(11 to 19)~~ distributed in the wings ~~(3, 4)~~ and the fuselage ~~(2)~~ of the aircraft and at least one fuel tank ~~(22)~~ disposed in the tail of the aircraft, said process making it possible at each instant of the loading to keep the center of gravity of said aircraft in an authorized range ~~(25)~~ of positions along the longitudinal axis (L-L) of said aircraft and taking into account:

the cargo weight MC, without fuel, carried by the aircraft;

the position XC, within said authorized range ~~(25)~~, of the center of gravity of said aircraft on the ground, when only said cargo weight MC is loaded and distributed in the aircraft; and

the weight of fuel PFQ necessary for the accomplishment of the mission that said aircraft is to fulfill with said cargo weight MC,

wherein:

an optimal position CGt to be reached for said center of gravity is determined, within said authorized range ~~(25)~~, when said cargo load MC and said weight of fuel PFQ necessary for the mission are loaded on board said aircraft;

the relation (R) linking the variation in position of the center of gravity of the aircraft to the variation in weight of fuel inside said tail tank ~~(22)~~ is determined;

weights of fuel are poured into said tanks, the sum of which weights constitutes a provisional loading weight MP, which is less than said weight of fuel PFQ necessary for the mission and which, added to said cargo weight MC, causes the center of gravity of the aircraft to go from said position XC corresponding to the latter to a provisional position XP, such that the feeding into said tail tank of a weight of fuel equal to the difference Δ between the weight of fuel PFQ necessary for the mission and the provisional loading weight MP causes, in accordance with said relation (R), said center of gravity of the aircraft to go from the provisional position XP to the optimal position CGt; and

a weight of fuel equal to said difference Δ is poured into said tail tank ~~(22)~~.

2. (Currently amended) The process as claimed in claim 1, wherein said provisional loading weight MP results from weights of fuel poured only into said tanks ~~(11 to 19)~~ of the wings and of the fuselage.

3. (Currently amended) The process as claimed in claim 1, wherein said provisional loading weight MP results from weights of fuel poured into said tanks ~~{11 to 19}~~ of the wings and of the fuselage, as well as into said tail tank ~~{22}~~.

4. (Currently amended) The process as claimed in claim 1, wherein at least some of said weights of fuel are poured by successive fractions into corresponding tanks.

5. (Currently amended) The process as claimed in claim 1, wherein said cargo weight MC used and the center of gravity position XC used are default values of the actual cargo weight MC* and of the actual position XC* of the center of gravity and wherein, after loading of the tanks with the weight of fuel PFQ necessary for the accomplishment of the mission and obtaining of the optimal position CGt for the center of gravity on the basis of said default values MC and XC, the weight of fuel PFQ is redistributed by transfer between said tanks, with partial transfer from said tail tank into said other tanks, so as to take account of said actual values MC* and XC* while keeping the center of gravity at said optimal position CGt.

6. (Currently amended) The process as claimed in claim 1, wherein in the case where, after loading of said tanks with the weight of fuel PFQ necessary for the accomplishment of the mission and reaching of the optimal position CGt for the center of gravity, said weight of fuel PFQ must be increased by an additional weight dPFQ, said additional weight dPFQ is distributed into said tanks while keeping the center of gravity at said optimal position CGt.

7. (Currently amended) The process as claimed in claim 6, wherein said additional weight dPFQ is distributed only into said tanks ~~{11 to 19}~~ of the wings and of the fuselage.

8. (Currently amended) The process as claimed in claim 6, wherein said additional weight dPFQ is distributed into said tanks ~~{11 to 19}~~ of the wings and of the fuselage, as well as into said tail tank ~~{22}~~.